

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

KOFFAS ET AL.

CASE NO.: CL1646 US DIV

APPLICATION NO.: 09/934,903

GROUP ART UNIT: UNKNOWN

FILED: NOVEMBER 3, 2003

EXAMINER: UNKNOWN

FOR: GENES INVOLVED IN ISOPRENOID COMPOUND PRODUCTION

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed 1449 form.

Benefit of the earlier filing date of U.S. Patent Application No. 09/934,903, filed August 22, 2001 is claimed under 35 USC 120 for the above-referenced application. Thus, information cited in the priority application is not supplied with this Information Disclosure Statement. See 37 CFR 1.98(d).

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,



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Dated: 11/3/03

Enclosures



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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Application Number	unknown
Filing Date	Concurrently herewith
First Named Inventor	Chenget al
Group Art Unit	UNKNOWN
Examiner Name	UNKNOWN
Attorney Docket Number	CL1646 US DIV

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Spurgeon and Porter, Biosynthesis of Isoprenoid Compounds, pp 3-46, A Wiley-Interscience Publication, 1981	
		Horbach et al., Isoprenoid biosynthesis in bacteria: Two Different pathways? FEMS Microbiol. Lett. 111:135-140, 1993	
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		4-diphosphocytidyl-2C-methyl-d-erythritol synthase, SwissProt#Q46893, November 1, 1997	
		4-diphosphocytidyl-2-c-methyl-d-erythritol kinase, SwissProt #P24209, March 1, 1992	
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		Weng et al., Nucleotide Sequence of Escherichia coli pyrG Encoding CTP Synthetase, J. Biol. Chem., 261: 5568-5574, 1986	

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Sheet	2	of	4	Attorney Docket Number	CL1646 US DIV

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		Lange and Croteau, Isopentenyl diphosphate biosynthesis via a mevalonate-independent pathway: Isopentenyl monophosphate kinase catalyzes the terminal enzymatic step, Proc. Natl. Acad. Sci. USA 96: 13714-13719, 1999	
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		Genbank # X97985, Diapophytoene dehydrogenase (Staphylococcus aureus), May 23, 1996	
		Genbank # G.I. 5915671, Acinetobacter sp BD413 LytB, February 17, 2000	

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First Named Inventor	Chenget al
Group Art Unit	UNKNOWN
Examiner Name	UNKNOWN
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U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US - 5,429,929	07/04/1995	Misawa Norihiko et al.	
		US - 6,107,058	08/22/2000	GWYNN ET AL.	
		US - 5,530,189	06/25/1996	AUSICH ET AL.	

FOREIGN PATENT DOCUMENTS

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		CountryCode ³	Number ⁴	Kind Code ⁵ (if known)				
		WO	9958649	A1	11/18/1999	University of Maryland		<input type="checkbox"/>
		WO	0044912	A1	08/03/2000	Royal Holloway and Bedford New College		<input type="checkbox"/>
		WO	9911757	A1	03/11/1999	Washington State University Research Foundation		<input type="checkbox"/>
		EP	1072683	A1	01/31/2001	Kyowa Hakko Kogyo Co.		<input type="checkbox"/>
		EP	0747483	A2	12/11/1996	Hoffman-La Roche AG		<input type="checkbox"/>
		EP	0872554	A2	10/21/1998	Hoffmann-LaRoche AG		<input type="checkbox"/>
		WO	97 23633	A1	07/03/1997	Gist-Brocades B. V.		<input type="checkbox"/>
		WO	9735966	A1	10/02/1997	MAXYGEN INC.		<input type="checkbox"/>
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		WO	0046346	A1	08/10/2000	WASHINGTON STATE UNIVERSITY RESEARCH FOUNDATION		<input type="checkbox"/>
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		WO	00/6179 2	A1	10/19/2000	BAYER		<input type="checkbox"/>
		WO	0061793	A2	10/19/2000	GPC BIOTECH AG		<input type="checkbox"/>
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		WO	0183769	A2	11/08/2001	SALK INSTITUTE FOR BIOLOGICAL STUDIES		
		WO	0194561	A3	12/13/2001	WOLFGANG		
		EP	0816490	A2	01/07/1998	TOYOTA		
		EP	0955363	A2	11/10/1999	F. HOFFMANN-LA ROCHE AG		
		EP	0974661	A1	12/10/1998	TOYOTO		
		EP	1063297	A1	12/27/2000	KOREA KUMHO PETROCHEMICAL CO. LTD.		
		WO	01/8595 0	A2	11/15/2001	JOMAA PHARMAKA GMBH		

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		Rodriguez-Concepcion et al., Genetic evidence of branching in the isoprenoid pathway for the production of isopentenyl diphosphate and dimethylallyl diphosphate in Escherichia coli, FEBS Letters, Vol. 473, No. 3, May 19, 2000, pp. 328-332, XP00218415	<input type="checkbox"/>
		Rohmer, M., Isoprenoid Biosynthesis via the Mevalonate-Independent Route, A Novel Target for Antibacterial Drugs?, Progress in Drug Research, Basel: Birkhaeuser, CH, Vol. 50, 1998, pp. 135-154, XP000906878	<input type="checkbox"/>
		Lois et al., Cloning and Characterization of a gene from Escherichia coli encoding a transketolase-like enzyme that catalyzes the synthesis of D-1-deoxyxylulose 5-phosphate, a common precursor for isoprenoid, thiamin, and pyridoxol biosynthesis", FASEB Journal, Fed. Of American Soc. For Experimental Biology, Bethesda, MD, Vol 95, March 1998, pp. 2105-2110	<input type="checkbox"/>
		Scolnik et al., A Table of Some Cloned Plant Genes Involved in Isoprenoid Biosynthesis", Plant Molecular Biology Reporter, New York, NY Vol. 14, No. 4, December 1996, pp. 305-319, XP000884796	<input type="checkbox"/>
		Bartley et al., Molecular Biology of Carotenoid Biosynthesis in Plants", Annual Review of Plant Physiology and Plant Molecular Biology, Annual Reviews Inc, Vol. 45, 1994, pp. 287-301, XP000881128	<input type="checkbox"/>
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		Hanson et al., Methanotrophic bacteria", Microbiological Reviews, American Society for Microbiology, Washington, D.C., Vol. 60, No. 2, June 1996, pp. 439-471	<input type="checkbox"/>
		Zhu Xufen et al., Geranylgeranyl pyrophosphate synthase encoded by the newly isolated gene GGPS6 from Arabidopsis thaliana is localized in mitochondria", Plant Molecular Biology, Nijhoff Publishers, Dordrecht, NL, Vol. 35, No. 3, 1997, pp. 331-341, XP002153683	<input type="checkbox"/>
		Misawa et al., "Elucidation of the Erwinia Uredovora Carotenoid Biosynthetic Pathway by Functional Analysis of Gene Products Expressed in Escherichia Coli", Journal of Bacteriology, Washington, D.C., Vol. 172, No. 12, December 1990, pp. 6704-6712	<input type="checkbox"/>
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